

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-142228

(43)Date of publication of application : 17.05.2002

(51)Int.Cl.

H04N 9/07
G03B 11/00
H01L 27/146
H01L 27/14
H04N 9/04

(21)Application number : 2000-332943

(71)Applicant : TOYOTA CENTRAL RES & DEV LAB
INC

(22)Date of filing : 31.10.2000

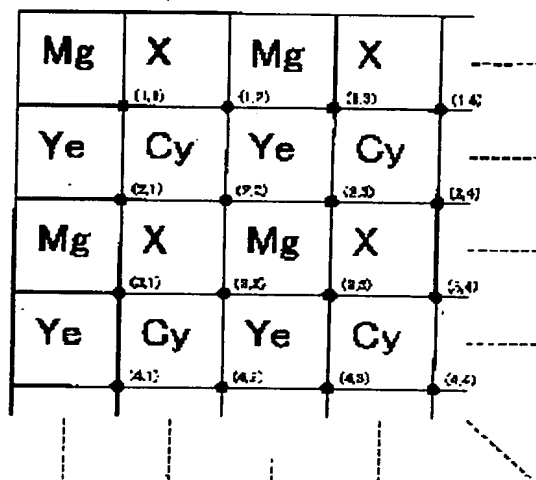
(72)Inventor : YAMADA KEIICHI

(54) IMAGE PICKUP DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide one image pickup device for independently obtaining a color image and a near-infrared light image.

SOLUTION: A color filter of cyan(Cy), yellow(Ye), and magenta(Mg), and a filter (X) with nearly constant transmittance regardless of wavelength visible light and near-infrared light regions are formed at each pixel formed by CMOS having sensitivity in the visible light and the near-infrared light. By linearly connecting the output of the pixel of four types of color filters, the wavelength transmission characteristics of four types of filters Cy, Ye, Mg, and X are adjusted to obtain blue, green, red, and near-infrared intensity of a surrounded point, thus obtaining visible light color and near-infrared light images independently. The visible light color image and the near-infrared light image are automatically switched for outputting according to the intensity of the visible light color image.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

BEST AVAILABLE COPY

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

BEST AVAILABLE COPY